

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for checking the position and/or the dimensions of mechanical pieces, comprising:

- a checking probe with
 - detecting devices,
 - power supply devices,
 - a logic unit,
 - memory devices adapted for storing values of at least one operation parameter of the checking probe, and
 - a remote transceiver unit for wireless transmission and reception of signals,
 - a base transceiver unit for the wireless transmission and reception of the signals to and from said remote transceiver unit,
 - a display device adapted for displaying, on the basis of signals received from the remote transceiver unit, information regarding said at least one operation parameter and an associated value, and
 - a manually-operated control device, connected to the base transceiver unit and adapted for generating, upon an operator's manual control, control signals and for transmitting said control signals by means of the base transceiver unit, said logic unit of the checking probe being adapted for selecting the value of said at least one operation parameter in response to the control signals received by means of the remote transceiver unit and to provide signals indicative of said at least one operation parameter and of the associated value,
- wherein the logic unit is adapted to provide, according to a coded sequence and in response to the received control signals, signals indicative of current selectable values of said at least one operation parameter, the display device displaying in sequence said current selectable values of said at least one operation parameter, said control signals being adapted to send to the logic unit either an updating control or a confirmation control to control the updating or the confirmation of the current selectable value displayed on the display device.

2. (Previously Presented) The system according to claim 1, wherein said display device is connected to the base transceiver unit, said indicative signals being wirelessly transmitted from the remote unit to the base transceiver unit.

3. (Previously Presented) The system according to claim 2, wherein the manually-operated control device includes said display device.

4. (Previously Presented) The system according to claim 1, including an interface unit, connected to said base transceiver unit, that includes said manually-operated control device.

5. (Previously Presented) The system according to claim 4, wherein said remote transceiver unit and said base transceiver unit define a single wireless two-way communication link.

6. (Previously Presented) The system according to claim 5, wherein the remote transceiver unit is adapted for transmitting by means of said single wireless two-way communication link detection signals generated in the checking probe by the detecting devices.

7. (Previously Presented) The system according to claim 5, wherein the base transceiver unit is adapted for transmitting by means of said single wireless two-way communication link signals for activating the checking probe on the basis of signals generated in the interface unit.

8. (Previously Presented) The system according to claim 1, wherein said remote unit and said base transceiver unit communicate using radio-frequency.

9. (Previously Presented) The system according to claim 8, wherein each of said base transceiver unit and said remote transceiver unit includes an antenna.

10. (Previously Presented) The system according to claim 8, wherein said at least one operation parameter of the checking probe is the transmission frequency of the remote transceiver unit.

11. (Previously Presented) The system according to claim 1, wherein said memory devices include a temporary register and a non-volatile memory.

12. (Previously Presented) The system according to claim 1, wherein said manually-operated control device includes at least one key and is adapted for generating said control signals in response to manual activation of said at least one key by the operator.

13. (Previously Presented) The system according to claim 1, wherein said manually-operated control device includes two keys and is adapted for generating said control signals in response to manual activation of said two keys by the operator.

14. (Previously Presented) The system according to claim 1, for the checking of mechanical pieces in a machine tool, wherein the checking probe is a contact detecting probe and the detecting devices include a microswitch.

15. (Previously Presented) A method for selecting a value of at least one operation parameter in a system for checking the position and/or the dimensions of mechanical pieces, the system comprising a checking probe with a logic unit, memory devices, and a remote transceiver unit for wireless transmission and reception of signals, a base transceiver unit for the wireless transmission and reception of signals to and from said remote transceiver unit, a display device, and a manually-operated control device connected to said base transceiver unit, the method comprising:

generating in the logic unit, and transmitting to the display device, according to a coded sequence, signals indicative of said at least one operation parameter and of an associated current selectable value,

displaying in the display device, on the basis of said indicative signals, information regarding said at least one operation parameter and associated current selectable value, and

generating, in the manually-operated control device, and transmitting from the base transceiver unit to the remote transceiver unit, control signals controlling the logic unit, said control signals being generated in response to a control manually provided by an operator on the basis of information regarding the current selectable values of said at least one operation parameter displayed in sequence on the display device, each of said control signals being adapted to send either an updating control or a confirmation control to control the logic unit to update or to confirm the current selectable value of said at least one operation parameter that is currently displayed.

16. (Previously Presented) The method according to claim 15, wherein said display device is connected to the base transceiver unit, and wherein said transmission of the indicative signals occurs wirelessly, from the remote transceiver unit to the base transceiver unit.

17. (Previously Presented) The method according to claim 15, further comprising:
selecting a value of two or more operation parameters of a system in which said memory devices include a temporary register, and

storing in said temporary register the current selectable value of each of said two or more operation parameters, as a consequence of the generating step.

18. (Previously Presented) The method according to claim 17, in a system in which said memory devices further include a non volatile memory, the method further comprising:

generating, in the manually-operated control device in response to a control manually provided by an operator, control signals corresponding to confirmation controls of selections made, and transmitting said control signals from the base transceiver unit to the remote transceiver unit, and
storing in the non-volatile memory, the values selected and stored in said temporary register.

19. (Previously Presented) The method according to claim 18, wherein said remote transceiver unit and said base transceiver unit are of the radio-frequency type, and wherein one of said two or more operation parameters of the system is a transmission and reception frequency of the remote transceiver unit.